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MODIFICATION INSTRUCTIONS for the *Kodak X-Omat* 180 LP PROCESSOR Service Code 3227 Modification No. 6 Type 1 Required

Purpose:
- Install new style HEAT EXCHANGER FITTINGS to minimize chemical leakage from the HEAT EXCHANGER connections.
- Install new style RACK SPRINGS that are more resistant to corrosion than the existing RACK SPRINGS.
- Install a new WASH TANK CLIP to increase the volume of water around the HEAT EXCHANGER in the WASH TANK to decrease false “Loss of Developer Cooling Ability” errors.

Important
Use qualified personnel to install this modification.

Service Effects:	See Page 3 for changes to Part Numbers
Special Requirements:	None
Serial Numbers:	See Page 3
Installation Time:	1.0 hour
Special Tools:	3 CLAMPS TL-2170
Parts Status:	Available at Service Parts Management, September 1995
Parts Requirements:	See Page 3.

HEALTH SCIENCES DIVISION

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This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

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Section 1: Serial Numbers and Parts Information

Serial Numbers

Important

Check the Serial No. on the Processor and in the table below. It may not be necessary to do the whole Mod. on your Processor.

Processor Serial No. Range:	Action Required: (See "Parts Requirements" on Page 3)	
1367 and Below	Install Groups 1, 2, and 3 parts	Do Section 2 through Section 6
1368 to 1429	Install Group 3 parts only	Do Sections 2, 5, and 6 only
1430 to 1476	Mod. 6 was factory installed. The 6 was not circled on the Mod. Label	Circle 6 on the MODIFICATION LABEL
1477 and above	Mod. 6 is factory installed	**None**

Changes to Existing Parts

Qty.	Existing Part No.	New Part No.	Part Description
2	562602 or 990418	**5B6156**	BARBED FITTING
1	943101	**5B6152**	FORMED TUBING - long
1	943100	**5B6153**	FORMED TUBING - short
2	246801	**246803**	HOSE CLAMP B
6	459344	**1C7106**	RACK SPRING
6	474239	**1C7107**	RACK SPRING
1	943683	**5B6750**	WASH TANK CLIP

Parts Requirements

Modification Kit 5B6770 includes:

	Qty.	Part No.	Description
	1	5B6773	Modification Instructions
Group 1:	2	5B6156	BARBED FITTING
	1	5B6152	FORMED TUBING-long
	1	5B6153	FORMED TUBING-short
	2	246803	HOSE CLAMP B
	2	532378	O-RING SEAL
Group 2:	6	1C7106	RACK SPRING
	6	1C7107	RACK SPRING
Group 3:	1	5B6750	WASH TANK CLIP

Section 2: Preliminary Procedure

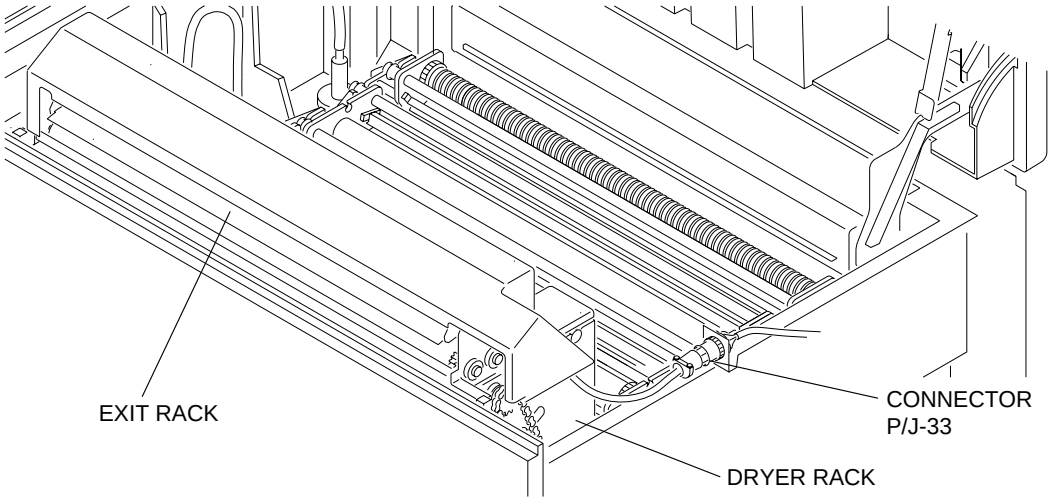
[1] De-energize the PROCESSOR.

[2] Move the main wall CIRCUIT BREAKER to “OFF”.

[3] Lift the TOP COVER.

[4] Remove:

- DRIVE SIDE PANEL
- WET SECTION COVER
- EVAPORATION COVERS



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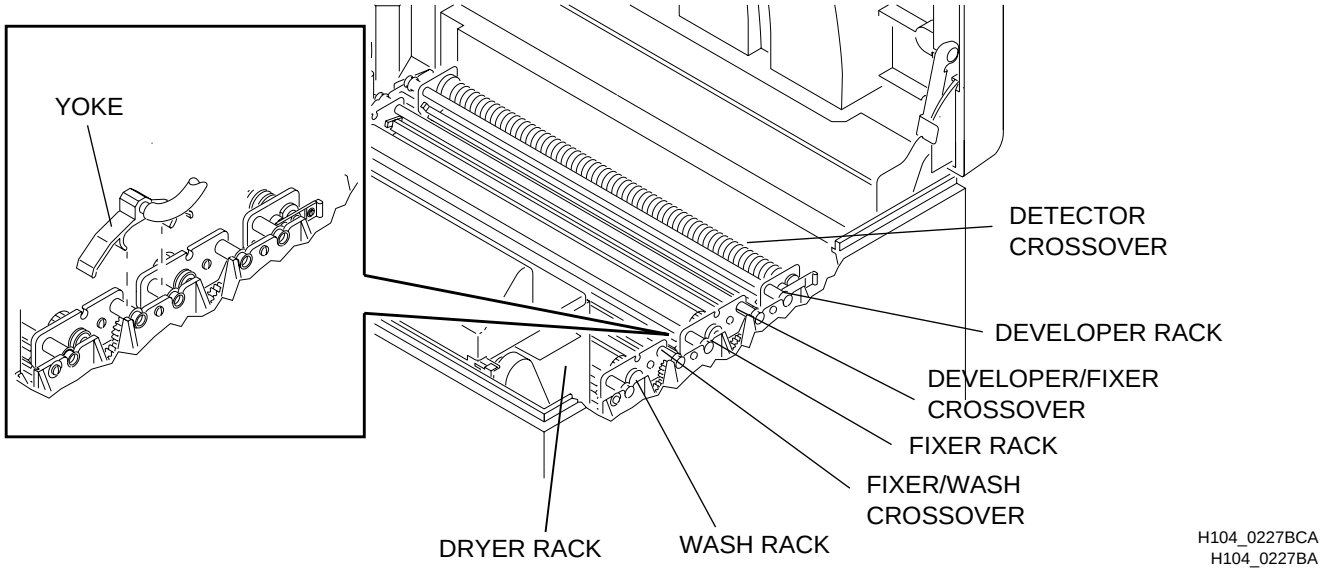
[5] Disconnect CONNECTOR P/J-33.



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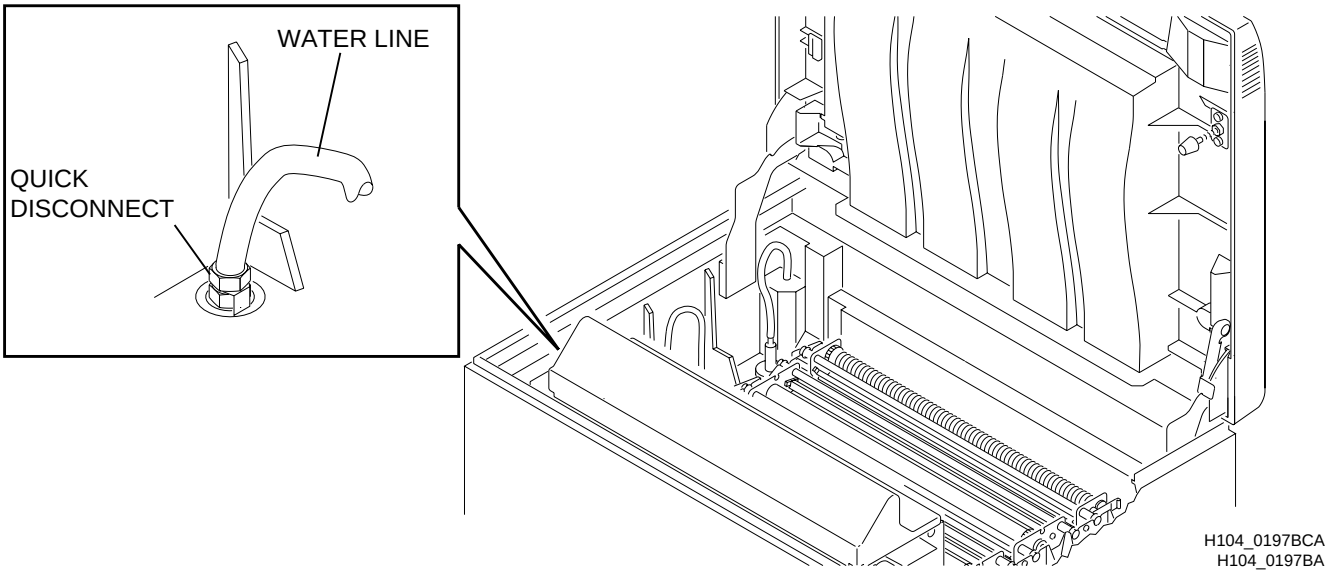
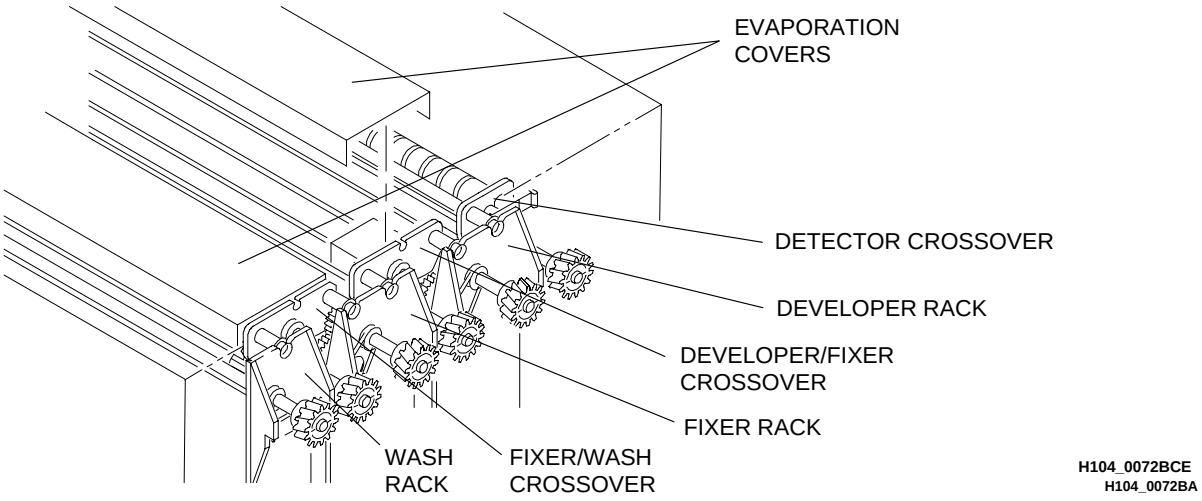
[6] Disconnect the YOKE from the CROSSOVERS.



[7] Disconnect the water QUICK DISCONNECT from the TANK.



[8] Remove:

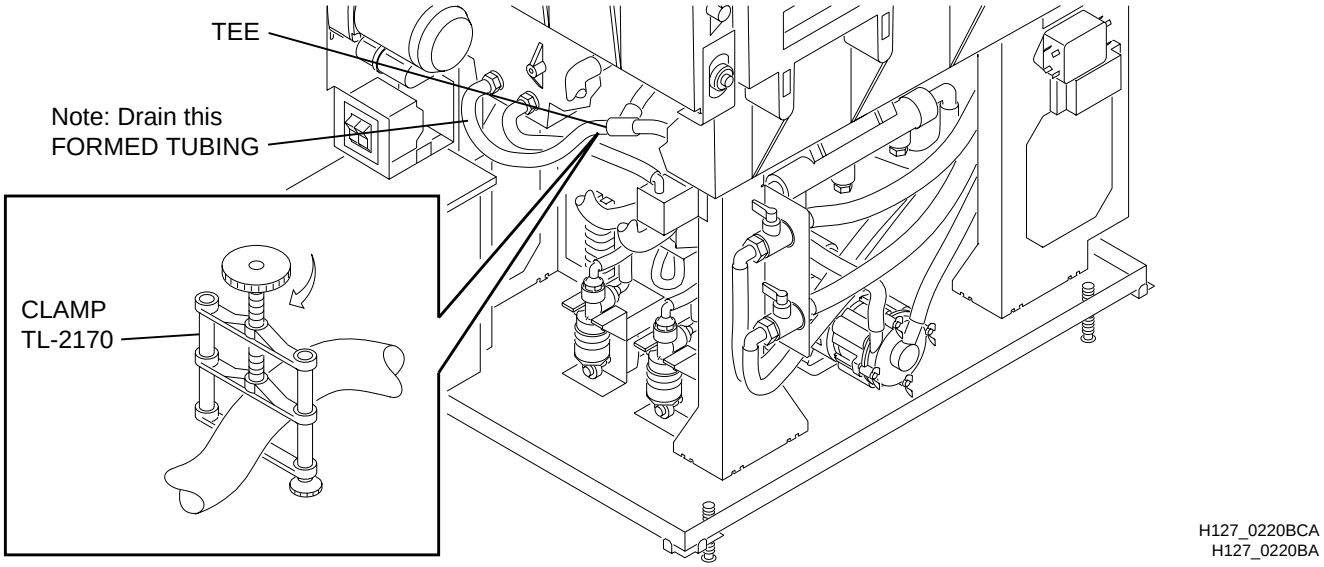
- EXIT RACK
- DEVELOPER/FIXER CROSSOVER
- FIXER/WASH CROSSOVER
- DRYER RACK (See the figure on Page 4)
- WASH RACK

Section 3: Installing the FITTINGS and FORMED TUBING

Removing the Existing FITTINGS and FORMED TUBING

Caution
Developer leakage may occur when you remove the HEAT EXCHANGER and FORMED TUBING.

[1] Rotate the ELECTRICAL BOX to the open position.

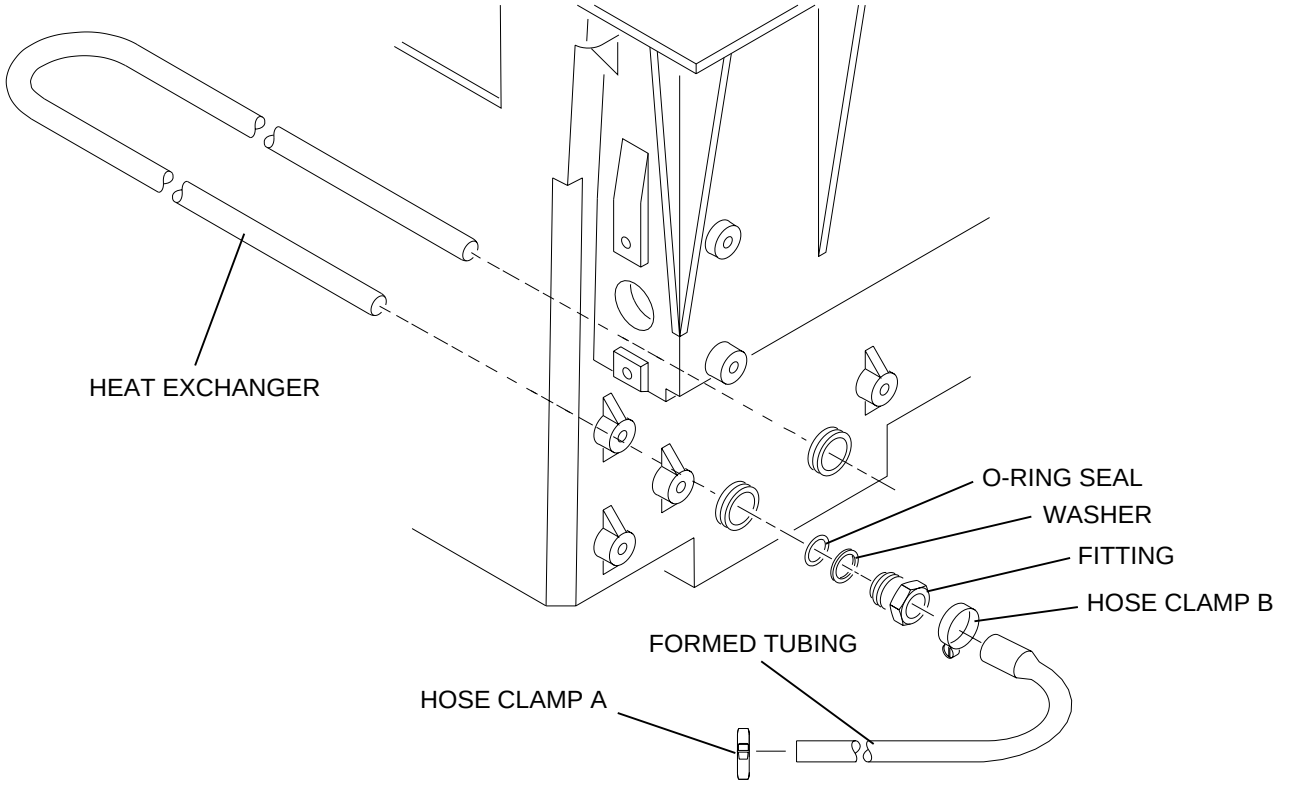


[2] See the illustration above:

(a) Install a CLAMP TL-2170 on each of the 3 FORMED TUBINGS connected to the TEE.
- Install the CLAMPS TL-2170 close to the TEE.

(b) Disconnect the FORMED TUBING, that requires draining, from the TEE. (See the figure above)
- Keep the HOSE CLAMP A

(c) Remove the CLAMP TL-2170 and drain the FORMED TUBING into a container.

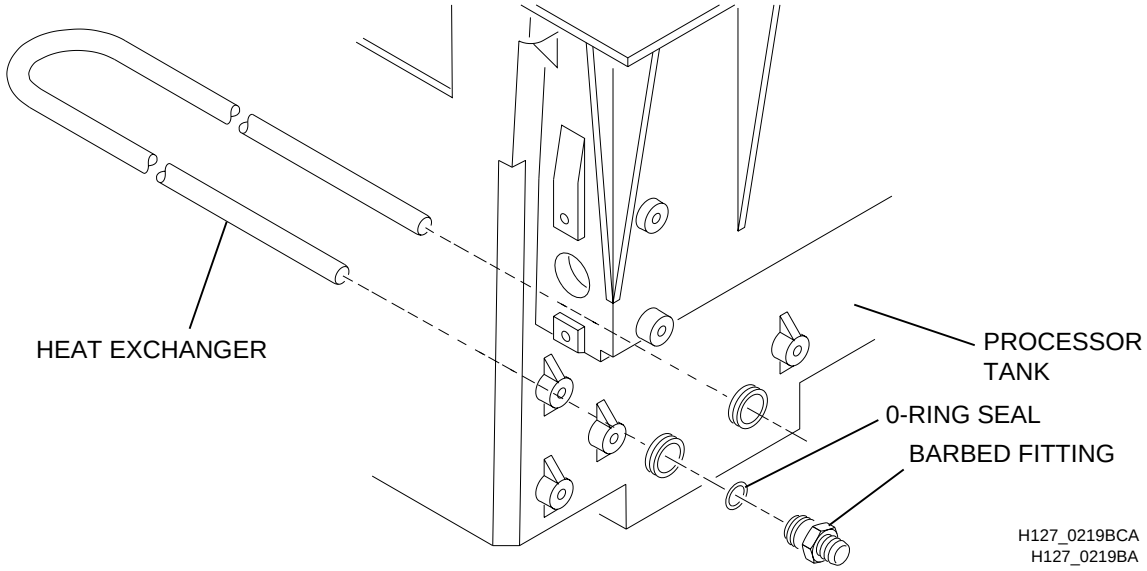


[3] Remove and keep the other HOSE CLAMP A.

[4] Remove and discard:

Part Description	Qty.
HOSE CLAMP B	2
FORMED TUBING	2
FITTING	2
WASHER	2
O-RING SEAL	2

Installing the New BARBED FITTINGS

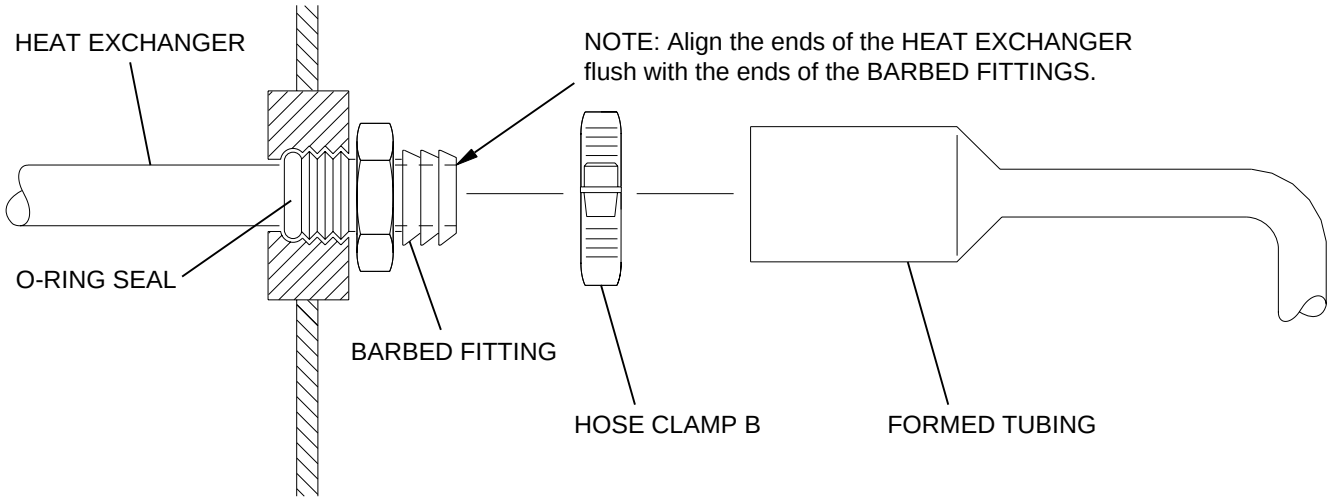


[1] Place the ends of the HEAT EXCHANGER through the holes in the side of the PROCESSOR TANK.

[2] Place a new O-RING SEAL on each end of the HEAT EXCHANGER.

Important

DO NOT use the existing WASHERS with the new BARBED FITTINGS.


HEAT EXCHANGER
NOTE: Align the ends of the HEAT EXCHANGER flush with the ends of the BARBED FITTINGS.
O-RING SEAL
BARBED FITTING
HOSE CLAMP B
FORMED TUBING

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[3] Place a new BARBED FITTING onto each end of the HEAT EXCHANGER.

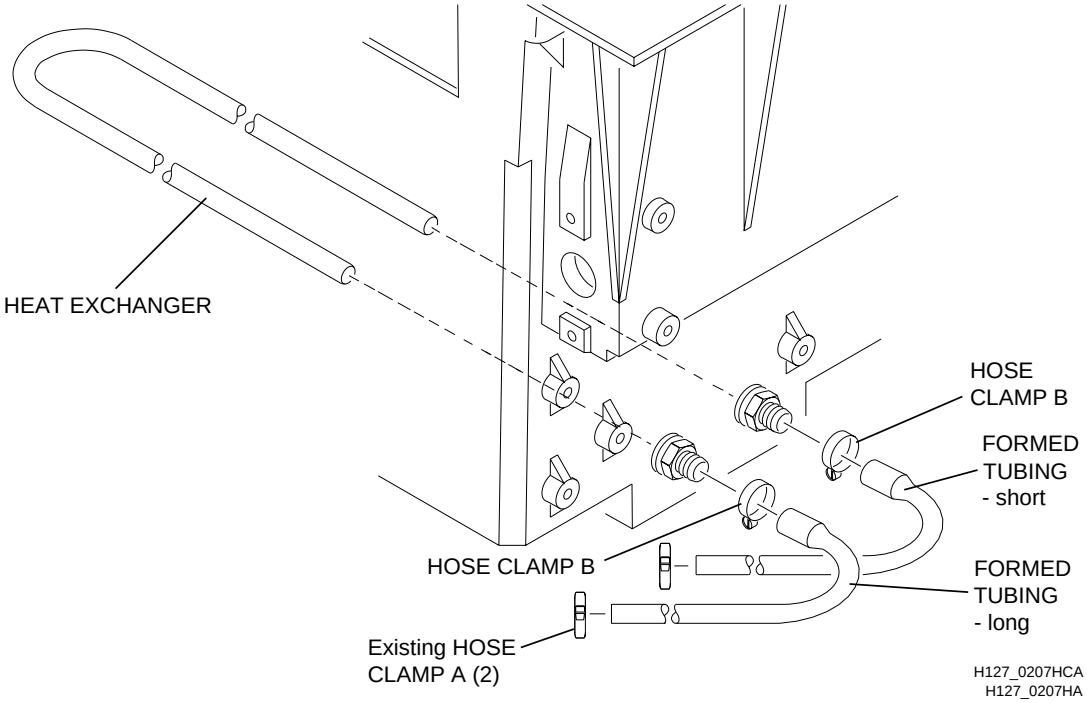
[4] Loosely rotate the new BARBED FITTINGS into the holes in the side of the PROCESSOR TANK.

Caution

Do not tighten the BARBED FITTINGS more than necessary to correctly seat the O-RING SEALS. Incorrect installation of the BARBED FITTINGS will cause damage to the O-RING SEALS and fluid leakage.

[5] Align the ends of the HEAT EXCHANGER flush with the ends of the BARBED FITTINGS and tighten the BARBED FITINGS.

Installing the New FORMED TUBING and New HOSE CLAMPS



Qty.	Part No.	Description
1	5B6153	FORMED TUBING - short
1	5B6152	FORMED TUBING - long
2	From Step 3, Page 7	HOSE CLAMP A
2	246803	HOSE CLAMP B

Important

Even when a CLAMP is correctly tightened at installation, cold flow or shrinkage of the FORMED TUBING will occur beneath the CLAMP. CLAMPS should be periodically checked and tightened, especially after FORMED TUBING replacement.

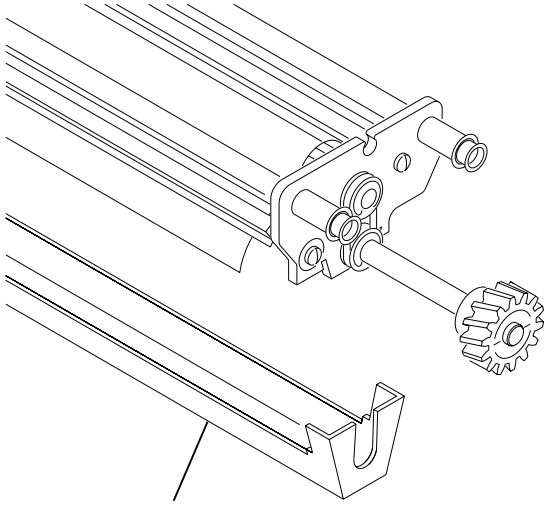
[1] Install the new FORMED TUBING and HOSE CLAMPS, and tighten the HOSE CLAMPS.

[2] Remove the 2 remaining CLAMPS TL-2170.

[3] Move the ELECTRICAL BOX back into position.

Section 4: Installing the New SPRINGS

Installing the New SPRINGS in the CROSSOVERS



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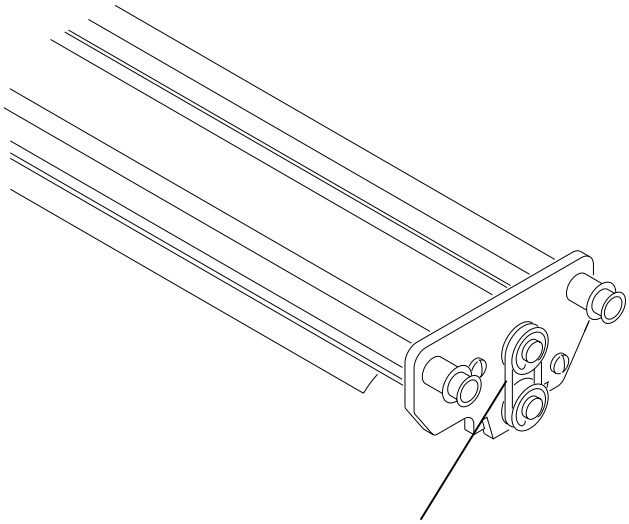
[1] Remove the TROUGHS from the CROSSOVERS.



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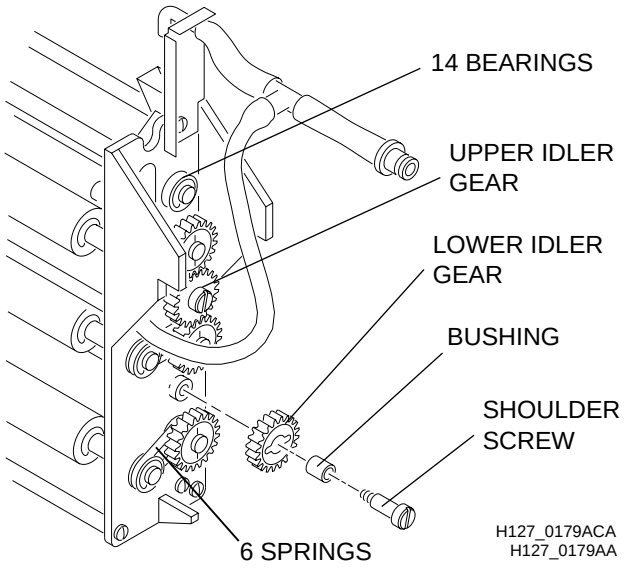
[2] Remove and discard the 2 SPRINGS from the DEVELOPER/FIXER CROSSOVER and the FIXER/WASH CROSSOVER.

[3] Install the 2 new SPRINGS, Part No. 1C7106, in both the DEVELOPER/FIXER CROSSOVER and the FIXER/WASH CROSSOVER.

[4] Install the TROUGHS on the CROSSOVERS.

Installing the New SPRINGS in the WASH RACK



[5] Remove from both the LOWER and UPPER IDLER GEARS on the WASH RACK:

- SHOULDER SCREW
- BUSHING
- IDLER GEAR

[6] Remove and discard the 6 SPRINGS from the WASH RACK

a. To remove the top SPRING on the non-drive side of the RACK, do the steps below.

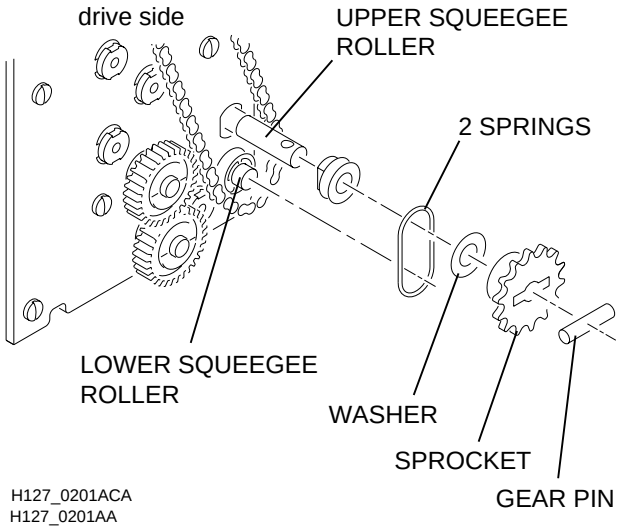
1. Remove the SPRING from around the BEARING.
2. Place the SPRING between the teeth of the GEAR.
3. Rotate the GEAR.

[7] Install the 6 new SPRINGS, Part No. 1C7107.

[8] Install the:

- IDLER GEARS
- BUSHINGS
- SHOULDER SCREWS

Installing the New SPRINGS in the DRYER RACK



[9] Remove the following parts from the UPPER SQUEEGEE ROLLER on the non-drive side of the DRYER RACK:

- SPRING and discard
- E-RING and keep

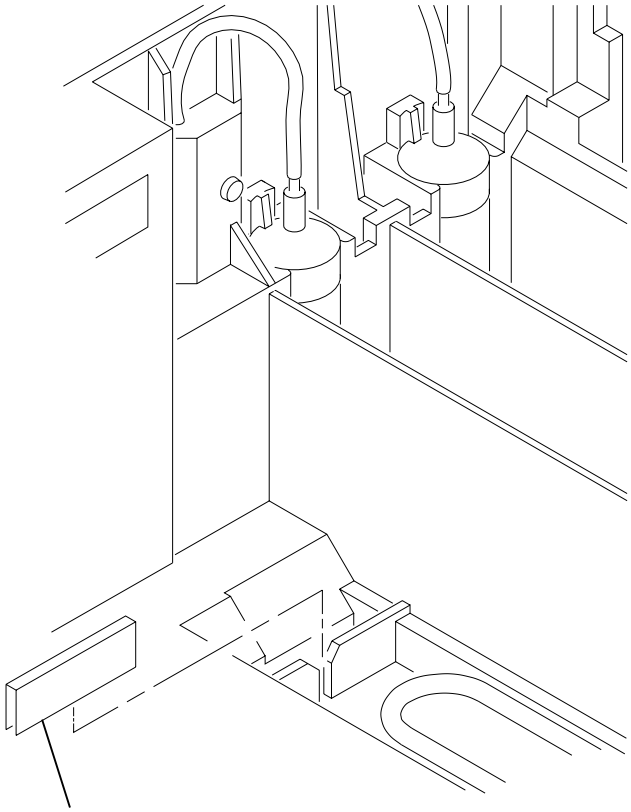
[10] For access to the GEAR PIN, move the UPPER SQUEEGEE ROLLER toward the drive side of the PROCESSOR.

[11] Remove from the drive side of the UPPER SQUEEGEE ROLLER:

- GEAR PIN
- SPROCKET
- WASHER
- SPRING and discard

[12] Reverse Steps 9 through 11 to install the 2 new SPRINGS, Part No. 1C7106.

Section 5: Installing the New WASH TANK CLIP



[1] Remove and discard the existing WASH TANK CLIP.

[2] Install the new WASH TANK CLIP.

Section 6: Final Steps

[1] Install:
- WASH RACK
- FIXER/WASH CROSSOVER
- DEVELOPER/FIXER CROSSOVER
- DRYER RACK

[2] Connect the water QUICK DISCONNECT to the TANK.

[3] Connect the YOKE to the CROSSOVERS.

[4] Install:
- EXIT RACK
  - Connect CONNECTOR P/J-33
- EVAPORATION COVERS
- WET SECTION COVER
- DRIVE SIDE PANEL

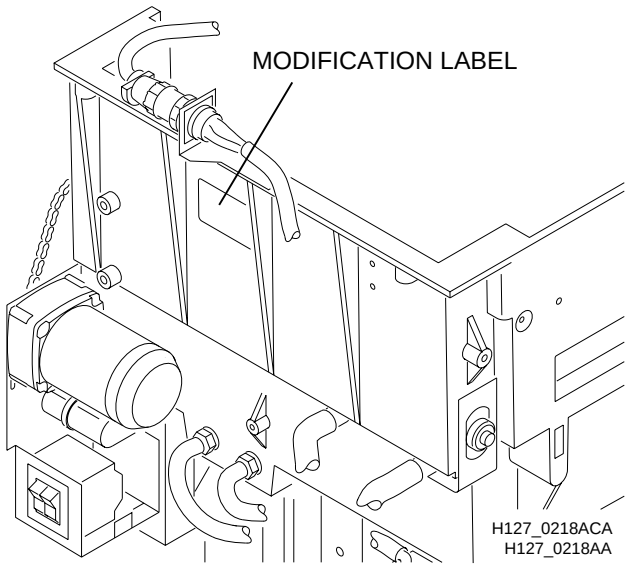
[5] Close the TOP COVER.

[6] Move the main wall CIRCUIT BREAKER to “ON”.

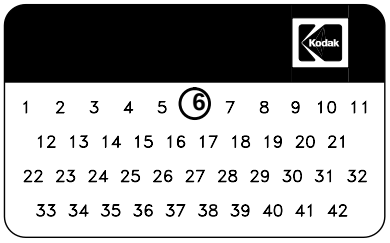
[7] Energize the PROCESSOR.

[8] Check for leakage from the HEAT EXCHANGER FITTINGS and FORMED TUBING.

[9] Check for correct operation of the PROCESSOR.



[10] Circle 6 on the MODIFICATION LABEL.



Publication Change Notice Table

Print Date	Pub. No.	ECO No.	Affected Pages	File Name	Notes
28JUL95	5B6773	2592-327	All	ma3227_6_28jul95.doc	New Modification Instructions

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